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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,395	12/19/2005	Francois Dronne	5284-120PRCE	8482

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EXAMINER

WENDELL, ANDREW

ART UNIT	PAPER NUMBER
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2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,395	Applicant(s) DRONNE ET AL.	
	Examiner ANDREW WENDELL	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9,10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9,10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5, 7, 9-10, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choksi (US Pat Pub# 2005/0250509) in view of Immonen et al. (US Pat# 7,010,305).

Regarding claim 1, Choksi teaches quality of service management method in a packet mode mobile communication network (Fig. 1), characterized in that, in order for a service to be executed by a subscriber to the network to which a data stream corresponds, determining a set of quality of service parameters including at least one first quality of service parameter corresponding to a subscriber priority (Sections 0009, 0035, and 0040; priority level of subscriber unit) and at least one second quality of service parameter related to a type of service (Sections 0009, 0035, and 0040, bandwidth services), wherein the set of quality of service parameters define characteristics of the data stream over the network (Sections 0009, 0035, and 0040, both service parameters are define the data stream characteristics); determining an overall priority level (Sections 0009, 0035, and 0040, whether to grant requested bandwidth for the session based on bandwidth available and priority level of subscriber) for processing the data stream based on a value of the at least one first quality of

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service parameter (Sections 0009, 0035, and 0040, priority level of subscriber unit) and a value of the at least one second quality of service parameter (Sections 0009, 0035, and 0040, bandwidth services), the value of the overall priority level alone indicating a priority for accessing network resources to execute the service by the subscriber (Sections 0009, 0035, and 0040, whether to grant requested bandwidth for the session); and determining at least one quality of service process (bandwidth) to be applied to the data stream based on the overall priority level, the quality of service process differentiating access to network resources (Sections 0009, 0035, and 0040), wherein the at least one second quality of service parameter related to the type of service used to determine the overall priority level includes a "Traffic Class" quality of service parameter (Sections 0009, 0035, and 0040, bandwidth services being related to traffic class and to the overall priority level). Choksi fails to teach a 3GPP framework.

Immonen teaches the quality of service parameter related to the type of service used to determine the overall priority level includes the "Traffic Class" quality of service parameter (Col. 9 lines 14-32, i.e. streaming, transmission classes, or background traffic class are all related to a traffic class), defined within the framework of the 3GPP telecommunications standard (Col. 10 lines 30-40).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate 3GPP telecommunications standard as taught by Immonen into Choksi's quality of service management in order to improve assignment of values of service attributes (Col. 3 lines 33-36).

Regarding claim 3, the combination including Choksi teaches a stage that consists in, in the case of a network overload, applying the quality of service process to the data stream, taking into account the overall priority level related to this data stream and the overall priority levels related to the data streams that correspond to other subscribers found on the network (Sections 0009, 0035, and 0040, takes in account of overall bandwidth).

Regarding claim 4, the combination including Choksi teaches a data stream is determined according to a table (Sections 0009, 0035, and 0040) that specifies an overall priority level value for each combination of the two quality of service parameters that corresponding, respectively, to a subscriber priority level and a service type (Sections 0009, 0035, and 0040).

Regarding claim 5, the combination including Choksi teaches that the network is managed by an operator, and the overall priority levels can be configured by the network operator (Fig. 2).

Regarding claim 7, the combination including Immonen teaches the quality of service parameter that corresponds to the subscriber priority level used for determining the overall priority level includes one of the parameters of the group that includes: the "Allocation Retention Priority" quality of service parameter (Col. 8 line 57), the quality of service sub-parameters and parameters are defined within the framework of the 3GPP telecommunications standard (Col. 10 lines 30-40).

Regarding claim 9, the combination including Immonen teaches the quality of service parameter related to the type of service used to determine the overall priority

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level further includes the "Traffic Handling Priority" quality of service parameter (Col. 9 lines 14-32), defined within the framework of the 3GPP telecommunications standard to associate a priority level to the data stream on the network when the data stream corresponds to an interactive type service (Col. 10 lines 30-40).

Regarding claim 10, the combination including Choksi teaches the execution of a service by a subscriber of the network to which a data stream corresponds, in order to determine an overall priority level for processing the data stream according to at least one quality of service parameter that corresponds to a subscriber priority level and at least one quality of service parameter related to the type of service (Sections 0009, 0035, and 0040); and determine at least one quality of service process to be applied to the data stream based on the overall priority level, the quality of service process differentiating access to network resources (Sections 0009, 0035, and 0040).

Regarding claim 12, the combination including Choksi teaches a quality of service process to a data stream, whilst taking into account the overall priority level for processing the data stream and the overall priority levels associated to the data streams that correspond to other subscribers on the network (Sections 0009, 0035, and 0040, bandwidth allocation).

Regarding claim 13, the combination including Choksi teaches a behavior table that specifies a value of the overall priority level for each combination of the two quality of service parameters corresponding, respectively, to a subscriber priority level and a type of service (Sections 0009, 0035, and 0040, subscriber priority and bandwidth request).

Regarding claim 14, the combination including Choksi teaches that the network is managed by an operator, and the overall priority levels can be configured by the network operator (Fig. 2).

Regarding claim 15, the combination including Choksi teaches service node of a core network (Fig. 1) that ensures the management of the communication link with the access network (Fig. 2).

3. Claims 6 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choksi (US Pat Pub# 2005/0250509) in view of Immonen et al. (US Pat# 7,010,305) and further in view of Jouppi et al. (US Pat# 7,031,718).

Regarding claim 6, Choksi in view of Immonen teach the limitations in claim 1. Choksi and Immonen fails to teach a service node and an access network radio resource.

Jouppi's method for selecting a quality of service teaches a service node (GGSN, Fig. 1a) of the core network that ensures the interconnection with an external network, and a management node of the access network radio resources (BTS and BSC, Fig. 1a).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a service node and an access network radio resource as taught by Jouppi into 3GPP telecommunications standard as taught by Immonen into Choksi's quality of service management in order to improve quality of service (Col. 6 lines 19-25).

Regarding claim 16, Jouppi further teaches a service node (GGSN, Fig. 1a) of a core network (Fig. 1a) that ensures the interconnection with an external network.

Regarding claim 17, Jouppi further teaches a radio resource management node (BTS and BSC, Fig. 1) of an access network.

Response to Arguments

Applicant's Remarks	Examiner's Response
"However, the 'type of request' in Choski and Applicants' claimed service parameter are completely different parameters. More specifically, the 'type of request' in Choski is not a quality of service parameter relating to whether an application requires real-time resources."	The examiner believes the applicant is reading more into the claims than present. The examiner does not see any mention of "real-time resources". The claim only states a "Traffic Class" which is a broad term and doesn't have to be real time.
"Choski fails to identify or delineate any overall priority level determined based on a subscriber priority and the 'Traffic Class' parameter."	Choski teaches bandwidth services which is related to traffic class and to the overall priority level because it decides whether to grant requested bandwidth for the session based on bandwidth available and priority level of subscriber (Sections 0009, 0035, and 0040). Further, Immonen teaches "Traffic Class" parameter in Column 9 lines 14-32 which deals with streaming,

	transmission classes, or background traffic class that are all related to a traffic class.
“The Examiner does not explain how Immonen, which merely mentions a ‘Traffic Class’ parameter, provides the skilled artisan a reason to use this parameter in the method of Choski. In particular, although a priority level based on subscriber priority is disclosed in Choski and a priority level based on Traffic Class is disclosed in Immonen, one skilled in the art would have no reason to determine a overall, i.e., global, priority level that is based on both the subscriber priority of Choski and the Traffic Class of Immonen.”	In response to applicant's argument that Choski can not be modified by Immonen without changing the operation of the system, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See <i>In re Keller</i> , 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Both Choski and Immonen teach a quality service management system in a communication system. Therefore it is simple substitution to combine Immonen into Choski.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW WENDELL whose telephone number is (571)272-0557. The examiner can normally be reached on 8:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Wendell/
Examiner, Art Unit 2618

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